1.   (Twice Amended)   A system for monitoring the operation of computer programs by collecting software related events relating to the performance of a plurality of target programs, each program running on a respective target processor, and each target processor being located on a separate system bus, the system comprising:

a plurality of event collection cards, each receiving software related events from a respective one of the plurality of target programs, wherein each of the plurality of event collection cards and the respective one of the target programs are installed on the same system bus, and wherein each event collection card includes:

a time stamp clock for providing a time stamp when each event is received;

an event memory for storing the received events;

a sync interface unit for receiving a sync signal;

a sync control unit for synchronizing the time stamp clock to the sync signal received by the sync interface; and

a collection control unit for time stamping the collected events according to the time stamp clock synchronized to the sync signal, for storing the time stamped events in the event memory, and for sending the collected software related events to a host computer that monitors the performance of the target programs based on the collected events.

10.   (Amended)   The system of claim 1, wherein the event collection card sends the collected events to the host computer for processing, and wherein the event collection card further includes:

a bus interface unit, connected to an event collection bus, for receiving events from the target processor over the system bus, wherein the bus interface unit forwards the received events to the collection control unit over the event collection bus;

a processing unit, connected to a local bus, for sending the collected events to the host computer; and

a bus isolation unit for allowing the event collection bus and the local bus to operate in parallel.

15. (Amended) The system of claim 1, wherein the collection control unit updates a memory count for each time stamped event stored in the event memory, wherein the event collection card sends the collected events to the host computer for processing, wherein the event collection card further includes:

a processing unit for sending the collected events to the host computer according to the memory count.

28. (Twice Amended) In a system having a plurality of target programs, each program running on a respective target processor, and each target processor being located on a separate system bus, wherein each of a plurality of event collection cards and a respective one of the target programs are installed on the same system bus, wherein each event collection card performs a method for monitoring the operation of computer programs, comprising:

receiving software related events from the respective one of the plurality of target programs, each software related event relating to the performance of a respective target program;

storing the received events in an event memory;

receiving a sync signal;

synchronizing a time stamp clock to the received sync signal;

time stamping the collected events according to the time stamp clock

synchronized to the sync signal;

storing the time stamped events in the event memory; and

sending the collected software related events to a host computer that monitors

the performance of the target programs based on the collected events.

36.   (Amended)   The method of claim 28, further including the steps of:

sending the collected events to the host computer for processing;

receiving events from the corresponding target processor over an event

collection bus;

sending the collected events to the host computer using a local bus; and

allowing the event collection bus and the local bus to operate in parallel.

40.   (Amended)   The method of claim 28, further including the steps of:

updating a memory count for each time stamped event stored in the event

memory; and

sending the collected events to the host computer according to the memory

count.

REMARKS

By this Amendment, Applicants have cancelled claims 16-27 without prejudice or

disclaimer and propose amending claims 1, 10, 15, 28, 36, and 40. Applicants